

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:	§	Group Art Unit:	2636
Steven Clay Moore	§		
Serial No.: 10/607,291	§	Examiner:	Mehmood, Jennifer A.
Date Filed: June 27, 2003	§	Confirmation No.:	8734
	§		
Title: Turn Signal Indicating The	§	Atty Docket No.:	AMG.4017.PAT
Vehicle Is Turning	§		

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REPLY BRIEF UNDER 37 C.F.R. §41.41

This paper is submitted pursuant to 37 CFR §41.41 in response to the Examiner's Answer mailed October 31, 2007 and in furtherance of the Notice of Appeal filed on April 27, 2007 for the above referenced patent application to appeal to the Board of Patent Appeals and Interferences ("Board") final rejections imposed by the USPTO on claims in the above referenced patent application. In light of the timely submission of this Reply Brief pursuant to 37 CFR § 41.41 and the arguments contained herein, Appellant respectfully requests that the Board reverse the rejections of the pending claims and remand this application to the Examiner with an order that the Examiner pass this case to issuance.

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III. STATUS OF CLAIMS

Claims 1-40 are pending and claims 1-40 stand rejected. Claims 1-40 are appealed herein. Claims 1-40 stand rejected by a final Office action dated December 28, 2006. More particularly:

- 1) As of the Examiner's Answer, claims 1 and 5 stand rejected under 35 U.S.C. § 112 as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention.
- 2) Claims 1, 2, 4-7, 14, 16, 17, 20, 22, 24, and 28 stand rejected under 35 U.S.C. § 102(b) as being unpatentable over Middlebrook et al., U.S. Pat. 4,638,295 (hereinafter "Middlebrook").
- 3) Claims 11-13, 18, 36, 37, and 39 stand rejected under 35 U.S.C. § 102(b) as being unpatentable over Dantoni, U.S. Pat. 5,673,019 (hereinafter "Dantoni").
- 4) Claims 8, 9, 21, 25, 26, 29, 30, 32, 33, and 35, stand rejected under 35 USC § 103(a) as being unpatentable over Middlebrook in view of Dantoni.
- 5) Claim 19 stands rejected under 35 USC § 103(a) as being unpatentable over Dantoni in view of Middlebrook.
- 6) Claims 3, 10, 15, and 23 stand rejected under 35 USC § 103(a) as being unpatentable over Middlebrook in view of Goertler, U.S. Pat. 4,348,655 (hereinafter "Goertler").
- 7) Claims 27, 31, and 34 stand rejected under 35 USC § 103(a) as being unpatentable over Middlebrook in view of Dantoni and in further view of Goertler.
- 8) Claims 38, and 40 stand rejected under 35 USC § 103(a) as being unpatentable over Dantoni in view of Goertler.

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

- 1) As of the Examiner's Answer, Claims 1 and 5 stand rejected under 35 U.S.C. § 112 as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention.
- 2) Claims 1, 2, 4-7, 14, 16, 17, 20, 22, 24, and 28 stand rejected under 35 U.S.C. § 102(b) as being unpatentable over Middlebrook.
- 3) Claims 11-13, 18, 36, 37, and 39 stand rejected under 35 U.S.C. § 102(b) as being unpatentable over Dantoni.
- 4) Claims 8, 9, 21, 25, 26, 29, 30, 32, 33, and 35, stand rejected under 35 USC § 103(a) as being unpatentable over Middlebrook in view of Dantoni.
- 5) Claims 19 stand rejected under 35 USC § 103(a) as being unpatentable over Dantoni and Middlebrook.
- 6) Claims 3, 10, 15, and 23 stand rejected under 35 USC § 103(a) as being unpatentable over Middlebrook and Goertler.
- 7) Claims 27, 31, and 34 stand rejected under 35 USC § 103(a) as being unpatentable over Middlebrook in view of Dantoni and Goertler.
- 8) Claims 38, and 40 stand rejected under 35 USC § 103(a) as being unpatentable over Dantoni in view of Goertler.

VII. ARGUMENT

(a) RESPONSE TO EXAMINER'S ARGUMENTS IN EXAMINER'S ANSWER

Appellant incorporates by reference its arguments from the Replacement Appeal Brief filed on September 27, 2007, regarding the patentability of the pending claims and, in the interest of brevity, those arguments will not be repeated herein. Instead, the new arguments from the Examiner's Reply will each be addressed.

(i) RESPONSE TO EXAMINER'S ARGUMENTS FOR GROUNDS OF REJECTION ADDED IN THE EXAMINER'S ANSWER

The Examiner's Answer adds to the appeal rejections of claims 1 and 5 under 35 U.S.C. § 112 for being indefinite and failing to particularly point out and distinctly claim the subject matter which the applicant regards as the invention. These rejections first and only appeared in the Non-final Office action dated June 20, 2006.

More specifically, the rejection states that the "frequency and/or intensity" must be changed to "frequency or intensity" because the specification only describes "frequency or intensity". Applicant respectfully notes that while the rejection is presented as a second paragraph rejection, the argument bases offered in writing as well as Applicant's discussions with Examiner indicated this rejection was a first paragraph rejection so Applicant traverses both herein.

With regards to the first paragraph rejection, the first two lines of page 3 of the specification describe "... the capability to power the turn signal at **the altered frequency and intensity**."¹ Furthermore, claims 1 and 5, as filed with the original application, included the language "frequency and/or intensity" so description of the embodiments to vary frequency, intensity, and frequency and intensity are part of the original disclosure.

[E]arly opinions suggest the Patent and Trademark Office was unwilling to find written descriptive support when the only description was found in the claims; however, this viewpoint was rejected. See *In re Koller*, 613

¹ Emphasis added.

F.2d 819, 204 USPQ 702 (CCPA 1980) (original claims constitute their own description); accord *In re Gardner*, 475 F.2d 1389, 177 USPQ 396 (CCPA 1973); accord *In re Wertheim*, 541 F.2d 257, 191 USPQ 90 (CCPA 1976). It is now well accepted that a satisfactory description may be in the claims or any other portion of the originally filed specification. These early opinions did not address the quality or specificity of particularity that was required in the description, i.e., how much description is enough.²

Regardless of the number of places the Examiner's Answer can point to in the specification where the specification describes frequency or intensity, the inclusion of "...the altered frequency and intensity"³ and claims for "frequency and/or intensity" in two of the 5 original claims (including the only independent claim) is inclusion in the original specification and clearly shows the inventor was in possession of the invention at the time of filing and that the inventor intended to claim embodiments capable of varying "frequency and intensity". Additionally, the original claim language was added to the specification as paragraphs 20 and 24. See the Office action response, dated November 30, 2005, which is responsive to the Office action mailed on August 24, 2005. Note that the examiner withdrew this second paragraph rejection citing as a basis for withdrawal that the original claim language of claims 1 and 5 were appended to the detailed disclosure section of the specification. See the final Office action dated December 28, 2006.

The specification is sufficient to enable a person of ordinary skill in the art to practice the invention as claimed, i.e. by varying the "frequency and/or intensity". The specification describes the logic for designing circuitry or code for execution on a processor to vary the frequency and intensity. In particular, the specification describes both analog and digital means for varying frequency and intensity. See the specification on page 3, last three paragraphs, as well as the first full paragraph on page 4. The specification also describes the means for building circuitry to vary the frequency and to vary the intensity. See figures 1-4, which illustrate circuits to vary the frequency, intensity, and frequency and/or intensity, respectively, as well as a timing diagram to

² MPEP §2163, sect 1, pp 2100-172, last par., through 2100-173, first par., Rev. 6, Sept. 2007.

³ Specification, page 3, second line.

illustrate timing. Because of the simple nature of the code or circuitry to accomplish the stated functionality, Applicant argues that no more detail is necessary for enablement. The disclosure of multiple means to vary both the intensity and frequency in the specification is sufficient to enable a person of ordinary skill in the art at the time of filing to make and use the invention as claimed without undue experimentation.

Applicant also argues that the meaning of the phrase "a frequency and/or intensity with which the turn signal blinks" is not made indefinite by the use of "frequency and/or intensity" but has a clear and definite meaning that places the public on notice of scope of the claimed invention. Section 112, second paragraph, of the Patent Act requires the patent to be definite. "The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention."⁴ "The test for definiteness is whether one skilled in the art would understand the bounds of the claim when read in light of the specification."⁵ "If the claims read in light of the specification reasonably apprise those skilled in the art of the scope of the invention, § 112 demands no more."⁶ "The degree of precision necessary for adequate claims is a function of the nature of the subject matter."⁷ □

The Federal Circuit's test is consistent with the Supreme Court's discussion about indefiniteness. "A zone of uncertainty which enterprise and experimentation may enter only at the risk of infringement claims would discourage invention only a little less than unequivocal foreclosure of the field."⁸

The phrase "frequency and/or intensity" in the context of claim 1, which states "...varying the frequency and/or intensity with which the turn signal blinks..." is sufficiently clear on its face to apprise those of ordinary skill in the art of the scope of the

⁴ 35 U.S.C. § 112, second paragraph.

⁵ *Orthokinetics, Inc. v. Safety Travel Chairs, Inc.*, 806 F.2d 1565 at 1576, 55 USLW 2356, 1 U.S.P.Q.2d 1081 (Fed.Cir.(Ohio) Dec 05, 1986); quoted in *Miles Labs., Inc. v. Shandon, Inc.*, 997 F.2d 870, 875, 27 USPQ2d 1123, 1126 (Fed.Cir.1993).

⁶ *Hybritech Inc. v. Monoclonal Antibodies, Inc.*, 802 F.2d 1367 at 1385, 231 U.S.P.Q. 81 (Fed.Cir.(Cal.) Sep 19, 1986); quoted in *Miles Labs., Inc. v. Shandon, Inc.*, 997 F.2d 870, 875, 27 USPQ2d 1123, 1126 (Fed.Cir.1993).

⁷ *Hybritech Inc. v. Monoclonal Antibodies, Inc.*, 802 F.2d 1367 at 1385, 231 U.S.P.Q. 81 (Fed.Cir.(Cal.) Sep 19, 1986); quoted in *Miles Labs., Inc. v. Shandon, Inc.*, 997 F.2d 870, 875, 27 USPQ2d 1123, 1126 (Fed.Cir.1993).

⁸ *United Carbon Co. v. Binney & Smith Co.*, 317 U.S. 228, 236, 63 S.Ct. 165, 170, 87 L.Ed. 232, 55 USPQ 381, 385 (1942).

invention. More specifically, the phrase “and/or” is commonly understood to indicate a list of one or the other or both. Thus, the phrase “frequency and/or intensity” is commonly understood to mean frequency or intensity or both frequency and intensity. These are three very definite concepts in light of the claims and in light of the specification. One skilled in the art would understand the bounds of the claim when read in light of the specification. Thus, Applicant traverses the rejection and requests that the rejection be reversed.

Claim 5, which is dependent upon claim 1, is also rejected for usage of “frequency and/or intensity”. Applicant argues that the rejection based upon the usage of the phrase “frequency and/or intensity” is traversed in the above arguments with respect to both 35 U.S.C. § 112 first paragraph and second paragraph. Thus, Applicant traverses the rejection and requests that the rejection be reversed.

Claim 5 is also rejected under 35 U.S.C. § 112, second paragraph based upon the phrase “position of the shaft and/or the amount of time”. While there is no explanation for the rejection, Applicant traverses the rejection with regards to 35 U.S.C. § 112, first paragraph as well as under 35 U.S.C. § 112, second paragraph. Similar to phrase “frequency and/or intensity”, the phrase “position of the shaft and/or the amount of time” was filed as part of the original application in claim 5 and is now appended to the Detailed Description section of the specification as paragraph 24. See the Office action response, dated November 30, 2005, which is responsive to the Office action mailed on August 24, 2005. The inclusion of claims for “position of the shaft and/or the amount of time” in the original claim 5 is inclusion in the original specification and clearly shows possession of the invention at the time of filing and the original intent to claim embodiments capable of adjusting the turn signal frequency and/or intensity proportionally to a “position of the shaft and/or the amount of time”. Note that the examiner withdrew this second paragraph rejection citing as a basis for withdrawal that the original claim language of claims 1 and 5 were appended to the detailed disclosure section of the specification. See the final Office action dated December 28, 2006.

Applicant also argues that the meaning of the phrase “position of the shaft and/or the amount of time” is not indefinite but has a clear and definite meaning that places the public on notice of scope of the claimed invention. Section 112, second paragraph, of the

Patent Act requires the patent to be definite. "The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention."⁹ "The test for definiteness is whether one skilled in the art would understand the bounds of the claim when read in light of the specification."¹⁰ "If the claims read in light of the specification reasonably apprise those skilled in the art of the scope of the invention, § 112 demands no more."¹¹ "The degree of precision necessary for adequate claims is a function of the nature of the subject matter."¹²

The phrase "position of the shaft and/or the amount of time" in the context of claim 5, which states "...to adjust the turn signal frequency and/or intensity proportionally to a position of a shaft and/or the amount of time," is sufficiently clear on its face to apprise those of ordinary skill in the art of the scope of the invention. More specifically, the phrase "and/or" is commonly understood to indicate a list of one or the other or both. Thus, "position of a shaft and/or the amount of time" is commonly understood to mean "position of a shaft" or "the amount of time" or both "position of a shaft" and "the amount of time".

"Position of a shaft and/or the amount of time" describes three very definite concepts in light of the claims and in light of the specification. The specification not only describes the position of the shaft and a shaft sensor capable of monitoring the position of the shaft but also how a commercially available sensor can be used for either analog or digital indication signals for the position of the shaft.¹³ In addition, the specification states that the system communicates to other drivers that the vehicle is turning by varying the frequency or intensity of "the turn signal in proportion to the position of the shaft,

⁹ 35 U.S.C. § 112, second paragraph.

¹⁰ *Orthokinetics, Inc. v. Safety Travel Chairs, Inc.*, 806 F.2d 1565 at 1576, 55 USLW 2356, 1 U.S.P.Q.2d 1081 (Fed.Cir.(Ohio) Dec 05, 1986); quoted in *Miles Labs., Inc. v. Shandon, Inc.*, 997 F.2d 870, 875, 27 USPQ2d 1123, 1126 (Fed.Cir.1993).

¹¹ *Hybritech Inc. v. Monoclonal Antibodies, Inc.*, 802 F.2d 1367 at 1385, 231 U.S.P.Q. 81 (Fed.Cir.(Cal.) Sep 19, 1986); quoted in *Miles Labs., Inc. v. Shandon, Inc.*, 997 F.2d 870, 875, 27 USPQ2d 1123, 1126 (Fed.Cir.1993).

¹² *Hybritech Inc. v. Monoclonal Antibodies, Inc.*, 802 F.2d 1367 at 1385, 231 U.S.P.Q. 81 (Fed.Cir.(Cal.) Sep 19, 1986); quoted in *Miles Labs., Inc. v. Shandon, Inc.*, 997 F.2d 870, 875, 27 USPQ2d 1123, 1126 (Fed.Cir.1993).

¹³ See the specification on page 3, first paragraph in the Detailed Description section, as well as the first full paragraph on page 4.

angle of the wheels, or the amount of time the car has been turning.”¹⁴ Furthermore, figure 4 illustrates a timing diagram including the amount of time during which the vehicle is turning. One skilled in the art would understand the bounds of the claim when read in light of the specification so Applicant traverses the rejection and requests that the rejection be reversed.

¹⁴ See the specification on page 3, first paragraph in the Detailed Description section, as well as the first full paragraph on page 4.

Conclusion

In view of the foregoing, the claims are allowable over the rejection under 35 U.S.C. § 112 and this Board is respectfully requested to reverse the rejections of these claims and remand this application to the examiner to pass this case to issuance.

While no fees are believed to be due, the Commissioner of Patents is hereby authorized to credit overpayments or debit underpayments via deposit account 50-3295.

Respectfully Submitted,

December 20, 2007

/Jeffrey S. Schubert/

Date

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